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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/494,199	01/28/2000	Ramin Rezaiifar	PA000090CIP	3141

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

PHILPOTT, JUSTIN M

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 06/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/494,199

Applicant(s)

REZAIIFAR ET AL.

Examiner

Justin M Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: correct U.S. Patent Application Serial Nos. should be inserted at page 1, line 8 and at page 9, line 4. Appropriate correction is required.

Claim Objections

2. Claim 29 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, claim 29 recites "the mobile station of claim 27", whereas claim 27 recites a packet data service node comprising various elements (lines 6-11) and configured to maintain Point to Point Protocol connection tables of dormant network connections associated with a mobile station. Since the preamble of claim 29 only recites a mobile station, and thus does not require the limitations of the packet data services node as recited in claim 27, claim 29 is in improper dependent form. Appropriate correction is required, e.g., amending claim 29 to recite: "The packet data services node of claim 27, wherein the first and second infrastructure elements comprise packet data service nodes".

3. Claim 3 is objected to because of the following minor informality: "a first infrastructure element of the packet data services network" (lines 2-3) should be changed to "a first

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infrastructure element of a packet data services network” because the present language lacks antecedent basis for the term packet data services network. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 3, 4 and 27-29 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,496,491 to Chuah et al.

Regarding claims 3 and 27, Chuah teaches a method of simplifying Packet Control Function network element functionality when a mobile station (e.g., PC 805 in FIG. 8) moves from a first infrastructure element (e.g., 815) of a packet data services network to a second infrastructure element (e.g., 820) of the packet data services network (e.g., see col. 8, line 64 – col. 9, line 41), the method comprising the step of maintaining a reduced entry PPP connection table (e.g., connection table, Table 4, in col. 6, lines 10-20; see also col. 10, lines 23-39). Further, regarding claim 27, Chuah teaches a PDSN (e.g., 810) comprising a radio-access-network-PDSN channel interface (e.g., 814, 819), inherently comprising a processor and processor-readable medium, and the medium containing a set of instructions to update the

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data services node (e.g., 152) of the communications network, the method comprising the steps of: transmitting from the second infrastructure element (104) a message (e.g., signal, see col. 6, lines 17-20) including a number of dormant network connections associated with the mobile station (e.g., see col. 5, lines 7-24 regarding the list of inactive channels). While, Azam may not specifically disclose the same message further includes a reduced list of identifiers or enhanced information associated with the dormant connections, Azam additionally teaches sending a second message from the second infrastructure element (104) including a reduced list of identifiers or enhanced information associated with the dormant connections (e.g., see col. 6, lines 23-41 regarding the new channel) in response to mobile station's (102) denying channel scanning. At the time of the invention it would have been obvious to one of ordinary skill in the art to transmit both messages (i.e., signals) in a single message in order remove the step of the mobile station (102) responding to the element (104) with a denying response in order to improve bandwidth efficiency. The method of Azam provides for improved communications wherein cross-talk and interfering signals are avoided via user initiated channel change (e.g., see col. 7, lines 1-14). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Azam to the method of Chuah in order to provide improved communications wherein cross-talk and interfering signals are avoided.

Further, regarding claim 9, Azam teaches the mobile station comprises an antenna (132), a processor (110) and a transmitter (130). Further, regarding claims 5, 9, 15 and 21, while Chuah in view of Azam teaches transmitting from the second infrastructure element (104) as recited in claim 1, one of ordinary skill in the art would be motivated to advantageously apply these teachings of Chuah in view of Azam to a system having transmitting from the mobile station in

order to achieve the same resource optimizations of Chuah in view of Azam wherein cross-talk and interfering signals are avoided.

Regarding claims 2, 12, 18 and 24, the identifiers (e.g., new channel) taught by Azam are not Service Request Identifiers.

Regarding claims 6, 14, 20 and 26, Azam teaches the enhanced information (e.g., new channel) includes packet zone information (e.g., a substantially different frequency than the previously used frequency, see col. 6, lines 26-41).

Regarding claims 7, 8, 10, 16 and 22, by sending both signals in a single message as discussed above regarding claim 1, the teachings of Azam conserve traffic channel resources by reducing session negotiation and registration. While Azam, may not specifically disclose using Mobile IP, such a protocol is well known in the art. Furthermore, Chuah specifically teaches PPP connections are utilized. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Azam to the method of Chuah in order to the reduce PPP session negotiation and Mobile IP registration thus conserving resources as suggested by Azam by sending signals in a single message.

Regarding claims 11, 17 and 23, as discussed above regarding claim 29, Chuah teaches infrastructure elements comprise packet data service nodes (e.g., Network Access Serving nodes receiving packet data, see col. 1, line 55 – col. 2, line 37).

Regarding claims 13, 19 and 25, while Azam may not specifically disclose the message comprises an origination message including an indicator that the dormant (i.e., inactive) network connections are dormant, Azam teaches the list of signal channels transmitted may be either active connections (e.g., see col. 4, lines 56-59) or inactive connections (e.g., see col. 5, lines 7-

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9). At the time of the invention it would have been obvious to one of ordinary skill in the art to include an indicator within the message to indicate whether the connections are either active or inactive, as suggested by Azam by teaching the connections may be either active or inactive wherein the radiotelephone (102) inherently determines or is configured to know whether the connections in the list are either active connections or inactive connections.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,761,618 to Lynch et al. discloses an updating technique for downloading new system identification list into a handset, and

U.S. Patent No. 6,466,571 to Dynarski et al. discloses a RADIUS-based Mobile IP Address-to-Mobile Identification Number Mapping for wireless communication.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9314 for regular communications and 703.872.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.4750.

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Justin M Philpott



June 16, 2003



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SUPERVISORY PATENT EXAMINER
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